

From: Jeff Harn [Jharn@arlingtonva.us]

Sent: Monday, November 19, 2007 4:55 PM

To: Darton, Terry

Cc: Robert Mace; William Roper

Subject: Arlington County Comments on Mirant Potomac River Generating Station Permit

Importance: High

Mr. Darton,

Please find attached an electronic copy of the letter that was mailed today containing staff comments on the draft State Operating Permit for the Mirant Potomac River Generating Station. In addition, Paul Ferguson, chairman of the Arlington County Board, will be attending the public hearing this evening and will be providing additional comments at the public hearing. Dr. William Roper, Director of the Arlington County Department of Environmental Services, will also be attending the public hearing, as will Robert Mace, Acting Director of the DES – Utilities and Environmental Policy Division. Please let me know if you have any questions about the attached comments.

Jeff Harn

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November 16, 2007

Mr. Terry Darton,
Air Permit Manager
Virginia Department of Environmental Quality
Northern Virginia Regional Office
13901 Crown Court
Woodbridge, Virginia 22193

Dear Mr. Darton:

Arlington County submits the following comments on the draft State Operating Permit (SOP) for the Mirant Potomac River LLC's Potomac River Generating Station, in response to the Virginia Department of Environmental Quality's public notice of October 19, 2007.

After reviewing the draft permit and the "Statement of Legal and Factual Basis" provided by DEQ, we believe there are serious deficiencies that must be addressed before issuing a final permit. Our concerns reflect the fact that the region does not currently meet National Ambient Air Quality Standards (NAAQS) for both ozone and fine particulate matter equal to or less than 2.5 microns in size ($PM_{2.5}$). Arlington County is also located only 1.3 miles downwind of the Potomac River Generating Station, given prevailing wind directions during summer months. This makes us especially concerned about any potential adverse impacts to the residents who live and work in and around the Crystal City area of south Arlington.

The Potomac River Generating Station is one of the largest emission sources in the metropolitan area. The plant is located near the center of the urban core and was constructed in the 1950's. It uses emission control technologies that are no longer considered state-of-the-art and the existing stacks do not meet Good Engineering Practice guidelines for stack height. In light of these facts, we encourage DEQ to modify the permit to address the following deficiencies to ensure that public health and safety are protected to the maximum extent possible.

1. Proposed permit will cause an exceedance of NAAQS for $PM_{2.5}$

Fine particulates are increasingly seen as an important public health concern. It is short-sighted to base the proposed permit emission limits

for PM_{2.5} on EPA's interim PM₁₀ modeling techniques. EPA's new PM_{2.5} guidance is currently undergoing public comment and when issued will almost certainly result in a substantial reduction in the Significant Impact Levels identified for PM_{2.5}.

DEQ should follow the lead of several other states, including New Jersey and Connecticut, which have already begun establishing PM_{2.5} modeling procedures and emission limits. This is especially important given regional efforts to achieve compliance with the PM_{2.5} standards and recent findings by EPA's Science Advisory Board showing that the ambient PM_{2.5} limit must be even lower than the new annual fine particulate standard to fully protect public health.

2. *Only a baghouse will ensure public protection against PM_{2.5} pollution on a continuous basis*

The Potomac River Generating Plant uses electrostatic precipitators for particulate control. This vintage 1970's technology will not be able to fully protect public health and safety under all operating conditions. The permit should require use of a baghouse to ensure the lowest PM_{2.5} emissions on a continuous basis, as well as to increase removal efficiencies for sulfur dioxide and mercury.

3. *Emissions limits are excessively high, do not fully protect public health, and will seriously worsen air quality and jeopardize public health in Alexandria and surrounding areas*

The proposed emission limits do not reflect recent operational and stack testing experience at the Potomac River Generating Station. As a result, the allowable particulate emissions levels are set almost three times higher than the emission levels actually achieved in 2006. This could allow the plant to substantially increase its emissions in the future, which runs counter to regional efforts to reduce particulate emissions. Proposed limits for opacity, sulfur dioxide (SO₂) and nitrogen oxides (NO_x) are also substantially higher than recent operating experience or reasonable expectations about the performance of modern pollution control equipment. All of these proposed limits need to be reexamined in light of the region's nonattainment status and need to address the serious concerns raised by Alexandria's modeling analyses that show serious localized impacts of the facility.

4. *Variable emission limits are akin to intermittent controls and should not be allowed under this permit*

Permit provisions that allow variable use of pollution equipment in response to plant operations violate the Clean Air Act prohibition on intermittent controls. These provisions should be removed from the permit. Enforceable limits should be based on reliable control technologies and realistic plant operating scenarios.

5. *Trona has not been proven to reduce particulate matter emissions and should not be permitted or sanctioned without appropriate NSR analysis, nor should alternative sorbents be approved without adequate justification*

Given the demonstrated increase in opacity since use of Trona was introduced at the facility to control sulfur dioxide emissions, it is important to reflect the likely impact of continued Trona usage in the adopted emission limits for particulates. Use of this technology should also be considered within the context of a New Source Review (NSR) analysis. Furthermore, approval of the use of alternative sorbents like sodium bicarbonate should only occur after prior notification and approval by VDEQ and the State Air Pollution Control Board of a detailed testing plan and public review of the results to evaluate the effects on overall pollutant emissions.

6. *Trona health impacts must be further evaluated*

The Virginia Department of Health should investigate the potential health impact of silica, a known carcinogen, at the 2 percent levels reported by the supplier of the Trona used at the facility.

7. *Continuous emission monitors (CEMS) for particulate matter and carbon monoxide (CO) must be required immediately*

Monitoring data from stack testing shows elevated CO emissions, following implementation of low-NO_x burners, Separate Over Fire Air (SOFA), and Trona injection. Since installation of these technologies did not follow New Source Review procedures, it is imperative that DEQ require installation of continuous emission monitors for PM and CO as soon as possible for compliance purposes.

8. *The permit needs to ensure that pollution controls are optimized at all times*

The plant is required to optimize all pollution controls in order to minimize emissions at all times, according to 9 VAC 5-40-20 E. To comply with this provision, the existing hot and cold electrostatic precipitators must achieve 99 percent and 96 percent design removal efficiencies, respectively, until

such time as an improved control technology like a baghouse is implemented. Trona use must also be optimized to achieve no more than 0.30 lb/MMBtu of SO₂ emissions.

9. Annual emissions must be held to a baseline

Annual emission limits must not exceed the baseline emissions over the most recent 24 months. In the absence of a New Source Review, as had been originally promised by DEQ before issuance of a permit, the plant should not be granted emission limits that exceed their baseline emissions.

10. Stack merger requires a pre-construction NSR permit

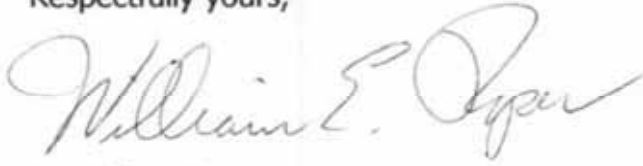
If Mirant decides to go through with the stack merger project at some future date, this proposal must go through the New Source Review process. In this case, no dispersion credit should be granted unless accompanied by installation of advanced pollution control equipment. We remain particularly concerned about the potential impacts of the stack merger concept because of the potential for dispersing the pollutants generated by the Potomac River Generating Station over an even larger area, including substantial portions of Arlington County.

11. Impending federal regulations should be reflected in the permit requirements at this time

The Clean Air Interstate Rule (CAIR) and Clean Air Mercury Rule (CAMR) requirements should be included in the permit since they are federally enforceable and will become effective during the life of the permit. Otherwise, the permit will have to be re-opened under VDEQ regulations to include these requirements. Also, the more stringent of the proposed limits and CAIR/ CAMR, that are protective of NAAQS, should be used as the permit limits. For instance, the proposed SO₂ limit of 3,813 tons per year is more stringent than the CAIR limit and should remain. Similarly, the CAIR NO_x limit of 1,734 tons per year should be the limit for this permit when it becomes enforceable in 2009.

Arlington County appreciates this opportunity to comment on the proposed permit for the Potomac River Generating Station. We recognize the many challenges facing the Department of Environmental Quality and the State Air Pollution Control Board in protecting and improving Virginia's air quality. We hope that our comments will assist you in revising the permit to better protect the health of our citizens.

Respectfully yours,

A handwritten signature in cursive script, reading "William E. Roper". The signature is fluid and elegant, with a large initial "W" and a long, sweeping underline.

Dr. William Roper
Director, Department of Environmental Services

Cc: Ron Carlee, County Manager
Paul Ferguson, Chairman, Arlington County Board
Richard J. Baier, P.E., Director, Alexandria Dept. of Transportation and
Environmental Services
William Skrabak, Environmental Quality Division Chief, Alexandria Dept.
of Transportation and Environmental Services